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Atty. Dkt. No. 062834-0179

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: George H. HOFFMAN, et al.

Title: SYSTEM, METHOD AND COMPUTER PROGRAM  
PRODUCT FOR A SUPPLIER INTERFACE IN A SUPPLY  
CHAIN MANAGEMENT FRAMEWORK

Appl. No.: 09/815,731

Filing Date: 03/23/2001

Examiner: Florian M. Zeender

Art Unit: 3627

**APPELLANT'S AMENDED BRIEF UNDER 37 C.F.R. 1.192 REFLECTING ENTRY  
OF OCTOBER 1, 2004 AMENDMENT**

Mail Stop: Appeal Brief - Patents  
Commissioner for Patents  
Washington, D.C. 20231

The following is Appellant's Amended Brief, submitted in triplicate and under the provisions of 37 C.F.R. 1.192 in response to the office action dated December 27, 2004 which requests that Applicants submit an amended Appeal Brief reflecting the entry of the applicants' October 1, 2004 amendment.

**1. Real Parties in Interest**

The real party in interest are the assignee of record, Restaurant Services, Inc.

**2. Related Appeals and Interferences**

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to appellant, the assignees, or appellant's patent representative.

**3. Status of Claims**

The present appeal is directed to claims 1-18, i.e., all of the presently pending claims in this application.

**4. Status of the Amendments**

One amendment was filed to remove potential section 101 issues that have been raised in other co-pending applications, but not raised in this application. This amendment was made to remove potential issues that might remain if this appeal is successful and thereby expedite future prosecution and would not have required a further search or examination. This amendment was not entered by the examiner. A second supplemental amendment was filed on October 1, 2004 to amend claims 16-18 to remove the antecedent section 112 informality noted by the examiner in his office action of February 10, 2004. This second amendment was entered by the examiner in an office action dated October 21, 2004.

**5. Summary of the Invention**

The present invention is a method, system and program product for a comprehensive system for supply chain management for a large plurality of stores that is predicated on receiving point of sale (POS) data from across the supply chain and what can be done with that POS data to manage raw materials used in production. The claimed system includes receiving POS data, aggregating the POS data, receiving a request from a supplier for information (which may be a forecast, per selected dependent claims), transmitting this information, adjusting a supply of raw materials based on the information, calculating a predicted amount of raw materials that should have been used, and comparing the actual amount of raw materials used to the predicted amount. An important aspect of the claimed combination is determining improper use of the raw materials from any of a variety of causes, such as, for example, waste, theft, and/or improper production methods for the final good. Such problems are indicated by a significant discrepancy between the predicted amount of raw material usage for a given amount of goods sales as compared to the actual usage as reflected by the purchase data for such raw materials.

Referring applicants' specification at page 83, lines 7-12 and Fig. 51, in block 5132 data is received from a plurality of stores relating to an amount of goods sold. In block 5134

the data is aggregated. In block 5136 a request is received from a supplier which includes a plurality of parameters. In block 5138 information from the database relevant to the supplier parameters is extracted. In block 5140 the information is transmitted to the supplier utilizing the network. In block 5142 the supply of raw materials from which the goods are produced is adjusted based on the information. At page 36, lines 7-28, page 37, line 21 – page 38, line 6, page 85, lines 15-23, and page 89, lines 1-24 is disclosed the steps of calculating a predicted amount of raw materials for a given level of sales of goods sold by the stores, and comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of discrepancy. Fig. 26 and pages 46-47 of applicants' specification disclose the steps of displaying an amount of raw materials sold to a store on a same page or screen as a recipe-predicted forecast for the raw material based on the amount of goods sold by the store, and determining a percentage of cost of the goods attributable to the raw materials.

## **6. Issues**

The issue on appeal is whether the Examiner erred in rejecting claims 1-27 under 35 USC 103 (a) as being unpatentable over the three-way reference combination of Hafner et al. (U.S. Patent No. 5,893,076) in view of Yamamoto (U.S. Patent No. 5,914,878) and further in view of Salvo et al. (U.S. Patent No. 6,341,271).

## **7. Grouping of the Claims**

The claims do not stand or fall together.

Group 1:	Claims 1, 3-5
Group 2:	Claim 2
Group 3:	Claims 6, 8-10
Group 4:	Claim 7
Group 5:	Claim 11, 13-15
Group 6:	Claim 12
Group 7:	Claim 16
Group 8:	Claim 17

Group 9:

Claim 18

**8. Argument**

**Group 1:** Claims 1 and others in this group have been rejected under 35 USC 103 over a three-way reference combination of Hafner et al. in view of Yamamoto and further in view of Salvo et al. This rejection is respectfully traversed.

The claims cover one form of comprehensive system for supply chain management for a large plurality of stores that is predicated on receiving point of sale (POS) data from across the supply chain and what can be done with that POS data to manage raw materials used in production. The claimed system includes receiving POS data, aggregating the POS data, receiving a request from a supplier for information (which may be a forecast, per selected dependent claims), transmitting this information, adjusting a supply of raw materials based on the information, calculating a predicted amount of raw materials that should have been used, and comparing the actual amount of raw materials used to the predicted amount. An important aspect of the claimed combination is determining improper use of the raw materials from any of a variety of causes, such as, for example, waste, theft, and/or improper production methods for the final good. Such problems are indicated by a significant discrepancy between the predicted amount of raw material usage for a given amount of goods sales as compared to the actual usage as reflected by the purchase data for such raw materials. By way of example, for a restaurant hamburger good, one ounce of ketchup may be called for by the recipe for hamburger production. However, if the purchases of ketchup for the store are significantly higher than expected, then either there is a theft problem, a waste problem, or a failure to follow the required recipe. In any of these cases, the restaurant manager must take action.

Hafner discloses a system for processing transactions between a single buyer and a single supplier. In Hafner, POS data is received by a replenishment system (column 5, lines 17-22) and a forecasting engine is used to predict future inventory needs (column 5, lines 41-47). A suggested order quantity generator 270 uses that prediction to generate a suggested order (SOQ). The supplier may then approve or modify this SOQ (column 5, lines 56-59).

Hafner does not disclose receiving data from a plurality of stores, or aggregating that data to then be sent to the suppliers. Hafner simply discloses a supplier-directed forecast in the context of a single supplier – single store relationship. Hafner does not disclose a management tool for a multi-store supply chain. Nor does it disclose adjusting a supply of raw materials based on the information, or “calculating a predicted amount of raw materials for a given level of sales of goods sold by the store; and comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of a level of discrepancy.”

Yamamoto discloses a production system for retail goods that includes a raw materials ordering system which determines production quantities of raw materials. Yamamoto makes up few of the deficiencies of Hafner.

Salvo discloses a system for monitoring inventory levels stored in a silo, and includes a control unit for determining the best time to replenish the inventory and at what price. There is no disclosure or suggestion of receiving POS data, coupled with calculating a predicted amount of raw materials for a given level of sales of goods sold by the store; and comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of a level of discrepancy.

The examiner states that Salvo “further teaches comparing the amount of inventory sold to a store with the calculated forecasted amount (See Col. 10, lines 62-Col. 11, line 37).” The examiner concludes that “It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the interface of Hafner et al. with the ability to adjust the supply of raw materials, as taught by Yamamoto et al., in order to respond to production plans.” And also concludes “It would have been further obvious to one of ordinary skill in the art at the time of the invention to compare the amount of raw materials sold to a store with a calculated forecasted amount, in view of Salvo et al., in order to ‘increase productivity and quality’ at the manufacturing site (Salvo et al., Col. 11, lines 15-16).”

But Salvo is dealing with silos and monitoring an amount in a silo in a manufacturing operation. It does not receive POS data. It is focused on comparing the quality of two different received lots of raw materials, either from the same vendor or different vendors. See column 10, line 65 – column 11, line 16. Salvo does not look at the manufacturing operation itself, or focus on manufacturing waste, or failure to follow a correct recipe, or other problems that would be reflected when a predicted amount of raw materials that the manufacturer should use to produce a certain number of goods is compared against the actual amount of raw materials used to produce the goods. Salvo focuses instead on quality of the raw material, while the claimed invention focuses on quantity and problems in the manufacturing process itself. This distinction is reflected in the limitations of “calculating a predicted amount of raw materials for a given level of sales” and then performing the step of “comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods.” These steps are missing from Salvo. Moreover, Salvo does not recognize the problem that these steps are addressing, namely problems in the manufacturing and/or the sale process.

To summarize, there is no motivation to make the three-reference combination since the problem of detecting problems in the manufacturing/sales process is not recognized by any of the references. A general desire to increase productivity does not lead or even suggest the specific claim steps herein. This is particularly so where the problem is not recognized in any of the three references used in the three-way combination. Specifically, the actual steps of “calculating a predicted amount of raw materials for a given level of sales” and then performing the step of “comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods” are not disclosed in any of the references.

Accordingly, for the reasons stated above, the claims of Group 1 are patentable over the three-way reference combination.

**Group 2:** Claim 2 is a dependent claim that depends from claim 1 and clarifies that the parameters of claim 1 relate to a forecasted amount of the required goods. This feature in combination with the other elements of claim 1 are not disclosed in the three

references cited by the examiner. Thus, this claim is allowable for the reasons set forth for claim 1 and for this additional reason.

**Group 3:** Claims 6, 8-10 are similar to the method claims of Group 1. However, these claims are in system format with system limitations. Substantially the same arguments of distinction should apply for these claims.

Accordingly, for the reasons stated above, the claims of Group 3 are patentable over the three-way reference combination.

**Group 4:** Claim 7 is a dependent claim that depends from system claim 6 and clarifies that the parameters of system claim 6 relate to a forecasted amount of the required goods. This feature in combination with the other elements of claim 6 are not disclosed in the three references cited by the examiner. Thus, this claim is allowable for the reasons set forth for claim 6 and for this additional reason.

**Group 5:** Claim 11 is similar to claim 1, but in program product format. Substantially the same arguments of distinction made for claim 1 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 5 are patentable over the three-way reference combination.

**Group 6:** Claim 12 is a dependent claim that depends from program product claim 11 and clarifies that the parameters of system claim 11 relate to a forecasted amount of the required goods. This feature in combination with the other elements of claim 11 are not disclosed in the three references cited by the examiner. Thus, this claim is allowable for the reasons set forth for claim 11 and for this additional reason.

**Group 7:** Claims 16-18 are similar to claim 1, except that the steps displaying an amount of raw materials sold to a store on a same page or screen as a recipe-predicted forecast for the raw material based on the amount of the goods sold by the store, to

thereby permit a comparison and determination of variance due to errors or loss; and determining a percentage of cost of the good attributable to the raw material have been added. The issue that these claims are dealing with is the same as for claims 1-15, namely, waste, theft, and/or improper production methods for the final good. Such problems are indicated by a significant discrepancy between the predicted amount of raw material usage for a given amount of product sales as compared to the actual usage as reflected by the purchase data for such raw materials. This comparison can be seen visually via the display step on the same page or screen, as shown in Fig. 26 of applicants' specification, and is also indicated by the calculated cost of the good attributable to the raw material. These steps in combination with the other steps of the claim are not disclosed in any of the references in the three-way combination for the reasons stated above. As noted, these references do not even recognize the problem being addressed by the present claims. So, there could hardly be motivation to fix such a problem.

**Group 8:** Claim 17 is similar to the method claim of Group 7. However, this claim is in system format with system limitations. Substantially the same arguments of distinction should apply for this claim as for claim 16.

Accordingly, for the reasons stated above, the claim of Group 8 is patentable over the three-way reference combination.

**Group 9:** Claim 18 is similar to the method claim of Group 7. However, this claim is in program product format with program product limitations. Substantially the same arguments of distinction should apply for this claim as for claim 16.

Accordingly, for the reasons stated above, the claim of Group 9 is patentable over the three-way reference combination.

## **9. Summary**

For the foregoing reasons, it is submitted that the examiner's rejection are erroneous, and reversal of the applied rejections is respectfully requested.



The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 672-5485  
Facsimile: (202) 672-5399

William T. Ellis  
Attorney for Applicant  
Registration No. 26,874

**APPENDIX**

1. A method for providing a supplier interface, comprising:
  - a) receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
  - b) aggregating the data in a database;
  - c) receiving a request from a supplier, the request including a plurality of supplier parameters;
  - d) extracting information from the database relevant to the supplier parameters in response to the request;
  - e) transmitting the information from the database to the supplier utilizing the network;
  - f) adjusting a supply of raw materials from which the goods are produced based on the information; and.
  - g) calculating a predicted amount of raw materials for a given level of sales of goods sold by the store; and
  - h) comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of a level of discrepancy.
2. The method of claim 1, wherein the parameters relate to a forecasted amount of the required goods.
3. The method of claim 1, wherein the network includes the Internet.
4. The method of claim 1, wherein the information is displayed utilizing a network-based interface.
5. The method of claim 1, wherein the stores include restaurants.

6. A system for providing a supplier interface, comprising:
  - a) logic for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
  - b) logic for aggregating the data in a database;
  - c) logic for receiving a request from a supplier, the request including a plurality of supplier parameters;
  - d) logic for extracting information from the database relevant to the supplier parameters in response to the request;
  - e) logic for transmitting the information from the database to the supplier utilizing the network;
  - f) logic for adjusting a supply of raw materials from which the goods are produced based on the information;
  - g) logic for calculating a predicted amount of raw materials for a given level of sales of goods sold by the store; and
  - h) logic for comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of a level of discrepancy.
7. The system of claim 6, wherein the parameters relate to a forecasted amount of the required goods.
8. The system of claim 6, wherein the network includes the Internet.
9. The system of claim 6, wherein the information is displayed utilizing a network-based interface.
10. The system of claim 6, wherein the stores include restaurants.
11. A computer program product for providing a supplier interface, comprising:

- a) computer code for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) computer code for aggregating the data in a database;
- c) computer code for receiving a request from a supplier, the request including a plurality of supplier parameters;
- d) computer code for extracting information from the database relevant to the supplier parameters in response to the request;
- e) computer code for transmitting the information from the database to the supplier utilizing the network;
- f) computer code for adjusting a supply of raw materials from which the goods are produced based on the information;
- g) computer code for calculating a predicted amount of raw materials for a given level of sales of goods sold by the store; and
- h) computer code for comparing an amount of raw materials sold to a store and the predicted amount of raw materials for the given level of sales of goods, to thereby provide an indication of a level of discrepancy.

12. The computer program product of claim 11, wherein the parameters relate to a forecasted amount of the required goods.

13. The computer program product of claim 11, wherein the network includes the Internet.

14. The computer program product of claim 11, wherein the information is displayed utilizing a network-based interface.

15. The computer program product of claim 11, wherein the stores include restaurants.

16. A method for providing a supplier interface, comprising:

- a) receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) aggregating the data in a database;
- c) receiving a request from a supplier, the request including a plurality of supplier parameters;
- d) extracting information from the database relevant to the supplier parameters in response to the request;
- e) transmitting the information from the database to the supplier utilizing the network;
- f) adjusting a supply of raw materials from which the goods are produced based on the information;
- g) displaying an amount of raw materials sold to a store on a same page or screen as a recipe-predicted forecast for the raw materials based on the amount of the goods sold by the store, to thereby permit a comparison and determination of variance due to errors or loss; and
- h) determining a percentage of cost of the goods attributable to the raw materials.

17. A system for providing a supplier interface, comprising:

- a) logic for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) logic for aggregating the data in a database;
- c) logic for receiving a request from a supplier, the request including a plurality of supplier parameters;
- d) logic for extracting information from the database relevant to the supplier parameters in response to the request;

e) logic for transmitting the information from the database to the supplier utilizing the network;

f) logic for adjusting a supply of raw materials from which the goods are produced based on the information;

g) logic for displaying an amount of raw materials sold to a store on a same page or screen as a recipe-predicted forecast for the raw materials based on the amount of the goods sold by the store, to thereby permit a comparison and determination of variance due to errors or loss; and

h) logic for determining a percentage of cost of the goods attributable to the raw materials.

18. A computer program for providing a supplier interface, comprising:

a) computer code for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;

b) computer code for aggregating the data in a database;

c) computer code for receiving a request from a supplier, the request including a plurality of supplier parameters;

d) computer code for extracting information from the database relevant to the supplier parameters in response to the request;

e) computer code for transmitting the information from the database to the supplier utilizing the network;

f) computer code for adjusting a supply of raw materials from which the goods are produced based on the information;

g) computer code for displaying an amount of raw materials sold to a store on a same page or screen as a recipe-predicted forecast for the raw materials based on

the amount of the goods sold by the store, to thereby permit a comparison and determination of variance due to errors or loss; and

h) computer code for determining a percentage of cost of the goods attributable to the raw materials.